ARCHITECTURAL MAGAZINE.

JUNE, 1837.

ORIGINAL COMMUNICATIONS.

ART. I. Remarks on Two Articles in the Quarterly and Edinburgh Reviews. By CANDIDUS.

It was with no small degree of impatience that I cut open the leaves of two articles, one in the Quarterly, the other in the Edinburgh, Review, both of which held out the promise of an architectural treat; the former being entitled "The Transactions of the Institute of Architects: " the latter. " The New Houses of Parliament." But the banquet turned out, in both instances, to be quite a Timon's one; for the covers being removed showed there were only dishes of hot water, with nothing more savoury to give it any flavour than rigmarole and twaddle. Rigmarole, indeed, pervades the Quarterly article to an extent truly surprising; the Institute coming in for no more than a very few words; after which there is a brief account of the mode of building cob walls, avowedly borrowed from the Encyclopædia of Cottage and Villa Architecture; while all the rest of the paper is occupied by a long tissue of coxcomical pedantry, to prove that cob walls were invented by Cain; that they were in vogue both at Babylon and Bagdad; among the Phœnicians and Carthaginians; adopted by the Romans, Goths, Moors, and Spaniards; introduced by the Phœnicians into the west of England; and, lastly, that cob is - what? - why nothing less than orthodox and conservative! After so much parade of cumbersome learning in order to arrive at such a truly farcical conclusion, I am surely justified in attributing to this paper the character of rigmarole. Neither are we a whit better informed than before as to the real value of building in cob, or CWBB.

I will, however, serve all this lumber as the writer of it has done the Institute, and fling it overboard at once, confining myself to the only passage which shows what the author's opinions in regard to architecture (as far as he has any) really are. "We cannot shut our eyes," he says, "to the humiliating fact, that architecture, the chief of the arts (as the name implies), has never flourished in our British Isles, as it has done in Greece Vol. IV. — No. 40.

and Italy." Without going further, this single sentence suffices to prove that, however deep its author may be in literary lore, he is not deeply versed in the history of our national architecture; for, were all other testimony wanting, our cathedrals alone might convince him that architecture has flourished in Britain, and has reared monuments as magnificent, and certainly far more stately, more elaborate, and more varied, than any to be met with in Greece. As to architecture being the chief of the arts, that is too enigmatical for me even to guess what can be

meant by it.

However, instead of perplexing ourselves about meaning where there may be none, let us proceed to what the author considers one of the causes which have operated prejudicially to architecture in this country; namely, " the influence of a climate damp and cold, of stinted suns and lengthened winters, in which lofty halls, spacious apartments, vast windows, open corridors and porticoes (all those gorgeous appurtenances and ornaments in which architecture delights to revel), so far from tending to render in-door existence happy, would be the instruments of discomfort, disease, and uneasiness." Seldom have I encountered anything more exquisitely malaprop than this. In order to reconcile the notable doctrine to facts, we must, in the first place, suppose, that, so far from being at all mitigated, our climate must now be greatly colder, and more inclement, than it was many centuries ago; when Westminster Hall, which has generally been considered hitherto as tolerably spacious and lofty, was erected. Very possibly, too, it is to be ascribed altogether to our damp and cold climate, that our cathedrals are such exceedingly confined and cribbed up buildings, compared with the spacious cella of a Greek temple. It must be confessed, that there have been writers who have taken quite a different view of the matter from what the very learned Theban of the Quarterly does; holding that the unfavourableness of climate was highly favourable to the development of our northern modes of building, by requiring spacious interiors, where a multitude might assemble under shelter from the weather. For a nearly similar reason it might be imagined, that open corridors and porticoes are by no means mere superfluities and idle architectural embellishments, in a country where shelter from rain is so desirable. At any rate, our ancestors appear to have been of such opinion; for they were in the habit of providing both, or what is tantamount to them, although not precisely the same in regard to form and designation. Cloisters (as frequently open as glazed with windows) and porches are, to all intents and purposes, such corridors and porticoes, treated consistently with the style itself, and frequently rendered highly beautiful features in it. Again, as to vast windows, which, it would seem, are a sine qua non of

architectural grandeur in the writer's estimation, I am afraid that he really does not know what he is talking about; because, Theban as he is, it would sorely puzzle him to point out, not only vast windows, but, in fact, any instances of windows at all in Grecian architecture, save a few solitary examples. Even in the dwelling-houses of Pompeii there is very little in the way of windows to be met with; and here, by the by, I may enquire of him, how happened it that, in the very teeth of his ingenious theory, the Pompeian houses, instead of having "lofty halls, spacious apartments, and vast windows," are remarkable for the extreme smallness of their rooms, many of them being not more than eight or nine feet square, and without any aperture for the admission of light? Will he account for it by saying that Pompeii was originally built in a high northern latitude, and afterwards transported through the air like the Casa di Loretto? which latter case might have been brought forward by him, to silence the scepticism of those who might be staggered at the idea of an entire city being so removed.

Besides what has just been remarked, Pompeii is rather a stumblingblock in the way of other parts of his doctrine; because its remains prove that a very high degree of architectural taste may be displayed within very limited spaces; consequently, that "the love for comfort and private possessions, so peculiar to Englishmen," need not cramp our taste, nor prevent our indulging in the most refined elegances of the art. In fact, as far as taste and the quality of architecture are concerned, a private residence affords more scope for the display of both, and of variety of effect, than almost any other single subject: of course, I mean to say, provided the architect possess talent, and be allowed to exercise it without being thwarted and con-

trolled.

Having despatched the man of learning in the Quarterly (one of whose discoveries is, that a second Lisbon earthquake would not prove a national calamity in England), let me now turn to the writer in the Edinburgh. If he says little that is either new or to the purpose, this gentleman cannot be accused of wearying us by very tedious prosing; since, with the exception of the quotations from Hamilton's pamphlet, the whole of his article does not amount to more than three pages. To say the truth, he does very little more than assent to the views of Mr. Hamilton; whom he professes to regard very highly as a critic; because, among other reasons, "he has been engaged in high political situations!" a most extraordinary pledge for his discrimination in matters of taste. Had he told us that Mr. Hamilton kept an excellent table, and a most accomplished chef de cuisine, it would have been equally, perhaps infinitely more, to the purpose; as that would help to account for what is now

quite a mystification. Whether Mr. Hamilton himself would

greatly admire the compliment, I pretend not to guess.

Those who have read that gentleman's pamphlet are aware that there is broached in it one highly original idea; namely, that Grecian possesses a decided advantage over Gothic architecture, as not being so liable to contract soil from soot and the weather. This the reviewer takes up con amore, and "presses it with great force on our attention," by printing it in larger type than the other extracts; after which he goes on to say, "The erection of a long series of Gothic window-buttresses (?) of jet black along the banks of the Thames will present, it may well be apprehended, anything rather than an agreeable, far less a grand, object on which the eye may repose." Jet black! forsooth: this is really painting the Devil some degrees blacker than he is. Yet a building of that colour would be, if not a particularly agreeable, at least a most original and curious, object; such a one as our metropolis cannot yet show. But the question is not one that admits of much disputation, being one which may be settled at once by the evidence of our eyes. Unless, therefore, Mr. Hamilton is prepared to maintain that black is white, it is to be presumed he would find it exceedingly difficult to maintain his opinion in the face of St. Paul's, a great portion of which is, although not jet black, very much blackened and discoloured. Or, how can such opinion be held tenable, with that exceedingly dingy, and no less sulky-looking building, the College of Physicians, flatly contradicting it?

Another fanciful notion, entirely the reviewer's own, is, that " ornamental luxuriancy" in Gothic is "excusable only where the building is upon an immense scale." Of a certainty, then, our ancestors were most inexcusable in applying the very high degree of embellishment they have done to such edifices as the King's College Chapel at Cambridge, Henry the Seventh's Chapel, St. George's at Windsor, Rosslyn, Beauchamp Chapel, Warwick, and many other pieces of architecture; which, so far from being upon an immense scale, are some of them by no means important in regard to size. Besides these, numerous examples might be cited of small chapels, chantries, porches, and similar things, to prove not only that extraordinary richness. but that a powerful degree of character and effect, may be produced upon a limited scale. It may, therefore, fairly be questioned, whether those who make amplitude of dimensions a sine quâ non condition in Gothic architecture can really enter into its spirit, or appreciate its beauties at all, unless they are magnified so as to strike them by the sole quality they are capable of judging of, namely, that of extraordinary size; which is, in fact, almost the sole criterion which the uneducated (viz. the uneducated in

art) can judge by.

As to the reviewer's opinion just mentioned, that is completely upset by what has been done by the Gothic artists themselves; so that we cannot admit the Edinburgh critic to be in the right, without coming to the conclusion that the latter have been most egregiously in the wrong; a conclusion which none but the critic himself is likely ever to arrive at.

Against Mr. Barry's design, the writer alleges nothing; for he does not even so much as let drop any expression which would lead one to suppose he has seen it: consequently, if he has seen it, it is to be presumed, that, as a design, he is satisfied with it; and only objects to its being executed to the exclusion of one in what he conceives would be a more appropriate style of architecture.

One thing, which is certainly very strange, is, that neither Mr. Hamilton himself, nor any of those who now profess to entertain the same views, should have come forward with their advice more seasonably, and protested against the style for the New Houses being confined to the Gothic, or some modification of it, when it was first known that such was the case. There was no secret made of it at the time; for it was fully announced by the public papers, and was further stated to be in entire accordance with public feeling on the subject. Therefore, if they chose to be silent during that stage of the business, when their advice, if worth following at all, might have been adopted with comparatively little inconvenience, their motives for now raising a clamour are somewhat open to suspicion: nor can they reasonably expect to be listened to, when they have shown so very little consideration as to suffer the matter to proceed so far as it has done without at all interfering. Perhaps, after all, their real object may already have been attained; it being, in all likelihood, nothing else than to attract public attention. As to architects, if any of them coincide with Mr. Hamilton and those who agree with him, the most forcible argument they could possibly bring forward would be, to make some design in the Grecian style, that would satisfactorily convince the public of its unquestionable superiority over the other for the intended purpose.

London, May, 1837.

ART. II. On the Effect which should result to Architecture, in regard to Design and Arrangement, from the general Introduction of Iron in the Construction of Buildings. By M.

[&]quot;For, meddle you must, that's certain, or forswear to wear iron about you." — SHAKSPEARE.

THE beautiful, in architecture, not less than the convenient, is dependent on a perfect regard to the simple purpose of a struc-

ture, and to the nature of the material to be used in its construc-Necessary, therefore, as it may be, for an architect to acquaint himself with all the leading styles of decorative building, so that he may be enabled to make a design conformable to the principles which respectively pervade those styles; and free, as he certainly is, in many cases, to adapt ancient or foreign outlines to modern or domestic purposes; it is still possible that he may be commissioned to construct a building in which scarcely any of the immediate rules which have governed the practice of foregone design can be, with propriety, exemplified. Such may be the peculiar requirements of the present occasion, or such the novel nature of the material to be employed, that an architect's knowledge of all preexistent modes will, in a direct sense, serve him nothing. As to the indirect advantages which an expanded and practised mind, though never before exercised on a certain particular theme, will have over another mind which only now begins with that theme, nothing, surely, need be said: but it is certain, that, fully to succeed in his new attempt, an architect must shield his mind from the immediate influence of all old laws and acquired habits (more particularly on account of the prejudices which are very likely among them); so that what he has to do may be the sole object of his attention; and that what he has done may be forgotten in all, save in that abstract intelligence which former studies and past practice may have

engendered. Now, this abstract intelligence should leave us to consider

that the massive grandeur and beauty of Egyptian architecture do not claim our admiration on the mere grounds of solidity, scale, and the elegance of individual parts; but on the reasons which legitimise these several distinctive features, as appropriate to the uses of the building, to the nature of its material, and as (poetically) obedient to the simple prototypes whence its general proportions and decorations are deduced. For the effective celebration of certain religious ceremonies, a specific arrangement of plan was necessary; and, for the joint purpose of durability and submission to the sculptor's tool, stone was the material to be employed. We have reasons to presume that the excavated and sculptured natural rock was the parent of the erected temple; and that as, in the first instance, the unremoved solid would naturally bear a large ratio to the artificially formed void. so, in the second, would the filial relationship be manifested in a. massiveness of proportion rather symbolising the family origin. than merely conforming to constructive necessity. A feeling for the ponderous had been engendered, and had become interwoven with an acquired sense of gloom, as necessary to the impressive. The horizontal superstructure of the Egyptian temple emulated, in a certain degree, the superincumbent rock of the sculptured

cavern; and the vertical supports exhibited a maximum thick-

ness, necessary to the harmony of relative proportion.

Here, then, we have the result of employing stone buildings under the influence of certain associations connected with cavern architecture, and which result may be simply described as a compromise between the actually requisite and the emblematical. The erected temple is sufficiently dissimilar from its excavated predecessor to show that the last had no direct influence on the design of the first; that is, there was no positive imitation of any one particular feature; but simply an embodying, in more refined form, of that idea or feeling which the contemplation of

the rock temple had established.

Again, the impressive and pleasing effect of Greek architecture is not attributable to the grandeur of its outline, or the elegance of its details; but to a certain obvious propriety, and to its self-proclaimed reasons for being what it is. As the Egyptian temple seems to have been indirectly influenced by the cavern, so the Greek temple acknowledges a prototype in the cabin of carpentry, the scantlings of which may have been delicate, and the design merely pleasing. The susceptible Greek, subsequently impressed by the gigantic proportions of the Egyptian temple, is prompted to emulate the solidity of its members, and the durability of its material. Instead of continuing to obtain posts and lintels from the forest, he now seeks for columns and architraves from the marble quarry; and exemplifies to an admiring posterity the legitimate influence of an added feeling, and a new material, upon Greek design. The employment of stone not only permitted, but positively enjoined, that increased substance which the marble portico exhibits, in comparison with its wooden precursor; and in the perfection of Greek example we see an unimprovable adjustment of the positive and ideal; the architect acting under a matured intelligence, issuing from a native acquaintance with the elegances of carpentry, impregnated by an acquired admiration for the grandeurs of Egyptian masonry.

In the Coliseum and Pantheon of ancient Rome, we see the first results of introducing the arch and vault to companionship with the architecture of Greece: but these are not the results which should have followed in regard to the critical merits of design. Since the pier and arch had, to all real intents and purposes, entirely superseded the column and beam, the latter should have been discarded, even as an ornament, from such façades as were intrinsically composed of the former. We do not here recognise, as in the cases of Egyptian and Greek architecture, the proper issue of a native prototype allied to an improved feeling or new material; on the contrary, we behold the mere juxtaposition of two heterogeneous principles, which cannot mix, and, consequently, yield no issue. We observe disagreeable neighbourhood, but no incorporation. As oil and water lie the one over the other, connected yet separate, so the Greek colonnades of the Coliseum float, as it were, over the Roman arcades; upon them, "but not of them." However the former, in a mere pictorial sense, may be estimable, they are, critically speaking, utterly absurd; the only way of at all justifying the application of them being grounded on the hypothesis, that the shell of the building was, in the first instance, formed without those arches which became subsequently necessary to prop it up.

Again, in the rotunda and portico of the Pantheon, as seen from without, and in the hemispheroidal vault and columnar disposition within, we see a clumsy attempt to amalgamate two heterogeneous principles; viz. the square and horizontal of the Greek temple, and the circular and vaulted of the Roman dome.

And what, then, should have been the effect of generally introducing the arch and vault in the construction of temples? Surely, we have an answer in the two varieties (the Norman and Pointed) of our own cathedrals, wherein the arch and vault form the sole governing principle, and give form, place, and just

appointment to every thing around and about them.

In these exquisite examples, we observe all constructive necessities, not only provided, but boldly shown; not only shown, but made advantageous to pictorial effect: not rendered merely endurable to the eye by decoration, but giving an enviable opportunity for decoration: not, in fine, hypocritical samples of the Iago school, "I am not what I am," but honest and eloquent creatures, begotten of science and of taste, and proclaiming the why and the wherefore for their being thus and thus.

A consideration, therefore, of the several leading varieties of the architectural world, of their excellences or defects, establishes us in the conclusion, that, however poetically art may speak, it should not the less speak truth; and that, if the introduction of any new form or material into the practice of architecture intrinsically affect the relative proportions or arrangements of its anatomical condition, it shall equally affect its extrinsic or superficial character; modifying, altering, or wholly superseding, customary laws of taste, as the case may be.

The great use now made of iron in our buildings, and the still increasing application which it will doubtless continue to receive, in short, the probability of its "general introduction," renders it more desirable that architects should qualify themselves, not less to adapt their designs to the new material, than the new material to their designs. It is possible to conceive that a building might be constructed entirely of iron; in which case, all habituated notions of those proportions which appertain

to masonry must, of course, be discarded: but I shall entertain the more probable supposition, that masonry will, in a great majority of cases, continue to form the main carcass of a building, iron being employed to supersede the carpentry of the roofs, floors. &c., and even the masonry of the portico. The joinery, too, of a structure may be expected, in a great measure, to give way, as we have already iron sashes, shutters, blinds, doors, &c. : and not only iron framework roofs, but also iron covering for the same. As to the effect which the use of iron is to have upon that department of design which comes under the head of arrangement, we must not consider ourselves at liberty to meet the requirements of any new material with the forfeiture. even in degree, of any old convenience. The ichnography of our designs must be made agreeably to the best practicable disposition; the material used, and the style of decoration adopted, being wholly subject to the bare purpose of the intended building.

The question, then, stands thus: -

Given, an entirely approved plan, practicable, at a moderate expense, in masonry and carpentry:

Required, a completed design, in which iron shall be employed

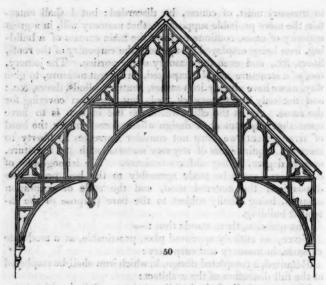
at the full discretion of the architect:

The mere shell of the building being modelled, without any reference to decoration (beyond that of a susceptibility to admit it), we proceed to make utility and beauty cooperate in the form and arrangement of the various iron standards, beams, ties, and arches, which are to be employed in the roofs, floors, verandas, &c. In considering the iron roof, we immediately perceive its great capabilities as a decorative feature, where circumstances admit of its being left open to the eye from within the building, as in the case of a church, hall, &c. Informed as we are in the examples of our cast-iron bridges, we cannot but recognise

an analogy between the two cases; and, stretching out our first idea (fig. 49.), we are naturally led on to vary it, until we find ourselves unconsciously in Westminster Hall, or Eltham



Palace. (fig. 50.) If we have lateral pressure to resist, why not bring the buttress to our aid? This need not make us absolute Gothic; though, should it fairly and obviously induce it, we shall be at perfect liberty to follow up the noble theme. Economically speaking, we shall have a double advantage; first, in the cheapness of our iron castings, as compared with wood carvings, when the



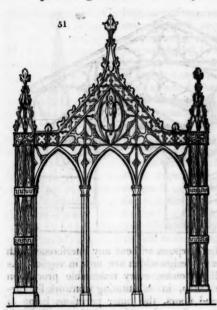
trusses of the roof are many, and the pattern intricate and rich; secondly, in the durability of the material, the tenacity and stiffness of which will enable us more readily to render its pressure vertical on the walls.

In the particular case now before us, the floor does not claim consideration: we are only left to fill in our door and window openings, and, perhaps, to supply a porch, portico, or veranda. The curved lines of our roof will dictate the form of the window heads, and the decorative details the pattern of our casements. The portal, if enclosed, will be a mere epitome of the stone and iron work of the hall: if open, the Greek portico of columns and entablature will be at once discarded, as too massive in the thickness of its supports, and as discordant in the horizontality of its superstructure, when regarded in conjunction with the delicate and curvilinear character of the roof and windows. Thus we shall arrive at the veranda, in which the slender column and arched crowning gable will suggest themselves, and lead to a skeleton exemplification (with some variation) of the Peterborough porch. (fig. 51.)

Thus far, then, we see that the effect of the use of iron in some buildings may reasonably be estimated as giving encouragement to a modified species of the Gothic style, partaking of

the lighter character of the Saracenic.

The idea of applying iron to churches and chapels will seem to thrive the more, the more we think upon it The frequent de-



sirableness of avoiding too great a span of roof in a building which must, nevertheless, be of great width, on account of the lateral galleries, circumstance a which urgently advocates the employment of iron columns, the allowable slenderness of which would be acknowledged as a great advantage by that large portion of a congregation, whose sight and hearing are usually so much impeded by the required thickness of wooden or stone pillars.

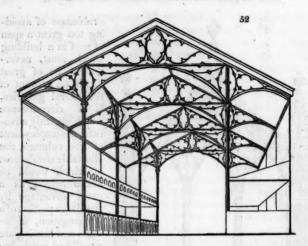
In a decorative point of view, also,

how beautiful (we may not reckon on the grandeur which results from the stone pillar and groined vaulting) might be the joint effect of the transverse and longitudinal castings above the level of the pillar capitals; and what additional richness would accrue in the foliated entwinings of the windows! The gallery fronts, too, might be formed of open ironwork; while the pulpit would afford a still more distinguished opportunity for decorative castings. (fig. 52.)

And now we have to consider the most striking feature of all. Since the body of the church is to be covered with an iron roof, wherefore not cap the tower with an iron spire? What more practicable in construction, or more beautiful in effect, than a lofty spiral octagon of open work, the lower compartment of which might form the bell-chamber, allowing a free egress for sound on all sides? (fig. 53.)

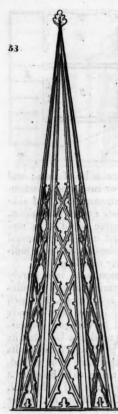
Having thus hunted my first idea from base to summit, let me start a second, and "follow it with modesty enough, and likelihood to lead it." I have considered the application of iron to a banqueting saloon and church: let me now test it by the more humble requirements of a dwelling-house.

The foremost recommendation which iron will carry with it, in the estimation of a gentleman intending to build his residence, will be its fire-proof qualities; and it is evident it may be used to the



extent necessary to that purpose, without any interference with those modes and rules of design which are now in vogue. As it regards mere dwelling-houses, every reasonable precaution against fire would be taken, in substituting ironwork for carpentry in the roof and floors, the inner partitions being of masonry, like the outer walls. In such case, almost all that is now joinery might remain so; since no fire, originating in accident, and left to itself, would do much injury to floor boarding, skirtings, doors, shutters, &c. Fire would require solid beams or joists in continuous proximity. Wood, by the foot superficial, would soon be abandoned as a food too meagre for its more grasping voracity; nor need we fear attaching to the iron trusses of the roof, and to the iron joists of the floors, ceiling joists of wood. The virtues of the plastered and whitened ceiling, in all dwelling-houses, will ever continue to be acknowledged, on account of the cleanliness it insures, and the reflected light it imparts.

The application of iron, in this instance, not having affected the style of the interior, the exterior may, of course, continue to exhibit its Greek or Latin decorations, and its portico of stone or masonry. I shall only enter a most determined protest against the use of cast-iron "classics." The Greek orders literally symbolise masonry; and, when iron comes to the relief of stone, the veranda necessarily supersedes the portico. If the entrance-door of the mansion (whose internal decorations are Greek) must be protected by a projecting portal of iron, it is imperative on the architect to give it that "manner to which it is born;" i. e., so to arrange its parts, and to give them such scant-



ling, as the requirements of constructive strength shall require. The nature of your material having been thus consulted, you will be left to harmonise your portal with the body of the mansion, by the use of Greek details in decoration. Accordingly as you do, or do not, desire breadth of effect, you will expand or compress the substance of your work; using the superficial open pilaster, or the solid pillar, as the case may be.

A very little application to the subject of cast-iron verandas will show the infinite variety of which this branch of design is susceptible. As an aid to the fancy, it were well to consult, in addition to the Gothic and Saracenic, the Indian and Chinese styles. The latter, in particular, is deserving of consideration.

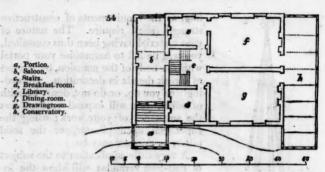
Let us, thirdly (and lastly), in the way of experiment, imagine ourselves commissioned by an iron-master to design him a mansion, which may at once serve as his "house," and as an advertisement of "the means whereby he doth sustain his house;" viz. of all the varieties of his foundery.

Fig. 54. shows a general idea of the plan. Fig. 55. is an elevation of the front.

The hall, in the one wing, and the conservatory in the other, being only one story high, would afford opportunity for two designs for ornamental roofs of cast

iron. The upper rooms of the main building would have their iron floors so constructed as to form a rich network, or otherwise ornamented ceiling, to the principal sitting-rooms below. The windows, sashes, blinds, &c., would be also of iron; and not the grates only, but the chimney-pieces likewise. The stairs, also, might be wholly of iron; the risers being of cast open work, and the balustrade of light filigree.

The exterior of the building would exhibit the following leading peculiarities, all of iron. An ornamental gutter cornice, with cast-work antefixæ, and decorative water-pipes. Canopies over the upper windows; and balconies under the same, forming canopies over the lower windows. A projecting veranda before one wing, to serve as a carriage portico; the elevation thereof exactly corresponding with that of the conservatory, forming the

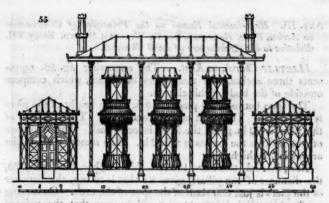


other wing. The chimney-tops might likewise be of iron; and much taste might be shown in the sashes or casements, particularly those of the conservatory. The entrance-door and side lights, and the large window at the opposite end of the saloon, would also be susceptible of a high degree of richness and beauty; while I might confidently predict a striking general effect, resulting from the harmonious combinations of those individual features which I have been separately detailing.

Thus, we have seen how adaptable is iron, both in a purely useful and a highly decorative sense, to a variety of cases besides those of bridges and other works, public and private, in which (on the mere ground of practical worth) it has been already largely employed. I have before alluded to the daily increasing favour which it is obtaining, as leaving no doubt but that its application will become general. The positive extent of its admission will, of course, depend on the experience to be gained, from many a trial and experiment not yet made, as to how far it is economical on the united principles of first cost and endurance, and how far objectionable on the score of oxidation and other

effects of the atmosphere.

I may, however, reckon on remedies being ultimately found for the evils which at first may prevail, and shall, in fine, venture to conclude, that iron will receive a welcome at the hands of taste, corresponding with that which it has received at the hands of science. To this end, let taste be taste, not prejudice; and, to determine the "effect which should result to architecture from the general introduction of iron," let us look into the philosophy of Egyptian, Greek, and Gothic design, where we shall find the examples of each proportionally charming, as the nature of the material has had its due influence in establishing the scantling and general outline; or as the imperative adoption of some new feature in design is unenthralled by old habits, and recognised as an independent governing principle. In the perfection of Greek and Gothic examples, we see evi-



dence to the truth of the canon I would now establish: in the defects of the Roman examples, we find that evidence corroborated. The result, therefore, we should seek to obtain is, a correct translation of the philosophy, not the poetry, of ancient architecture into the iron tongue. The philosophy of architecture (as of every thing else) is universal, and, therefore, translatable; but, as the classical J. H. M. once observed, "You can no more translate the poetic essence, the distinguishing charm, of Homer's Iliad, than the delectable flavour of Lafitte's claret." By parity of reasoning, the critical error of imitating the Parthenon in cast iron would not be greater than the physical absurdity of squeezing Burgundy out of the British grape. The same abstract system of making wines, and of forming architectural principles, may pervade all countries; but the issue, the particular result produced, will differ, as the difference of material, climate, national customs, necessities, and feelings shall dictate.

To sum up, in brief, my opinion on the matter before us, I would say as follows:—

The general introduction of iron into the construction of buildings should no further affect design, than in those particular cases where it conspicuously enters into the ornamental parts of the composition: but, in such cases, it should become authoritative, and not subject; enforcing a regard for the elegant, to the exclusion of the grand; emulating the beauty of the Pointed Gothic outline, or the Greek detail; but avoiding companionship with those elements of sublimity which inform the masses of a York Minster, or with those features of majesty which distinguish a Parthenon.

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London, March, 1837.

ART. III. Experimental Essays on the Principles of Construction in Arches, Piers, Buttresses, &c. By WILLIAM BLAND. Essay VII. Relative to the Architecture of small Churches.

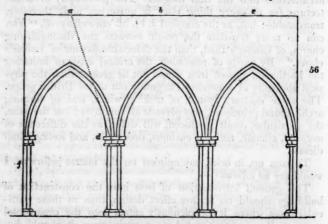
HARTLIP Church, in Kent. — The engraving fig. 56. represents three arches, and their piers or pillars, which compose

one side of the body of this church.

The span between the piers is 10 ft. The height of the piers is also 10 ft. The shaft of the piers is 8 ft. The diameter of the piers is 20 in.; and the form is octagonal. The thickness of the wall on the arches is 2 ft. 2 in. The masonry above the

arches is 7 ft. high.

Now, in 10 ft. there are 120 in.: this number, divided by 20, the diameter of the pillars, gives 6; that is to say, the diameter of the piers is just one sixth of the span of the arch. On turning to fig. 149. (Vol. III. p. 410.) it will be seen that the pointed arch, composed of voussoirs only, just balances on nearly equal dimensions of span and pier; having the diameter of the pier one sixth of the span. Again, in the experiment fig. 141. of the same Volume, it is shown that, when the masonry is carried



up to a b, the arch will carry double the weight it supported without the masonry. Now, the rise of this arch is $8\frac{1}{2}$ in., the span being 10 in., and the masonry above the rise $3\frac{1}{4}$ in.

In the drawing of the church (fig. 56.), the masonry above the rise is 7 ft., which equals the height of the fourteenth course in the last experiment referred to. From this, it is evident that the height of the masonry has added at least six times to the stability of each arch and pier above the balancing point, that point being called 1, and the strength of the mortar not being

57

taken into consideration; therefore proving the structure to be amply secure of itself. But it is farther strengthened by having the tower as a buttress at one end (e), and cross walls, &c., at the other end (f). Being thus circumstanced, any one of the arches will carry, at the points a b, and c, 60 lb.; which equals forty times the weight of one of the piers, and, therefore, proves the durability of this part of the church for ages.

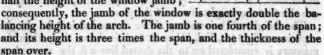
The point a is perpendicularly over the crown of the arch beneath; and a straight line may be drawn from that point to the pier, just touching the intrados of the arch, as represented by the

dotted line a d.

Windows. In the south-west window of Hartlip Church, represented by fig. 57., the plan and proportions are as follows: -

The span, or opening, is 20 in. The thickness of the middle jamb is 5 in. The height of the opening to the springing of the arch is 66 in. Now, if each of the above sums be divided by 5, the dimensions of the jamb, the proportions will be thus: -Opening, 4; jamb, 1; height, 13.

On putting the above jamb to experiment, with the arch of the opening resting upon it, and the springing of the arch quite coinciding with the line of the jamb beneath, as represented in the engraving, the arch just balanced firmhalf the height of the window jamb; -



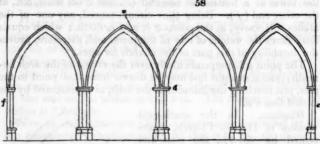
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Another window of this church was measured, being the east window of the south chancel. The dimensions were as follows:span, 2 ft., or 24 in. Thickness of the jamb, nearly 6 in. Height of the jamb, 61 ft., or 78 in. Now, these sums being divided by the thickness of the jamb, will give the following: - Span, 4; jamb, 1; height, 13; being the same as the former window.

In all the beautiful tracery-work above the jambs of the windows of churches which I have examined, I found that the straight line principle was carefully attended to.

Newington Church, near Sittingbourne. - The engraving

fig. 58. represents one side of this church: e is the tower wall, and f, the cross walls, &c.



The span between the piers is 13 ft. The height of the piers, 10 ft. The shaft of each pier, which is octagonal, is 7 ft. high. The diameter of the shaft is 24 in. The thickness of the wall on the arches is 28 in. The masonry above the arches is 3 ft. high. In 13 ft. there are 156 in., which, divided by 24 in., gives $6\frac{1}{6}$ in., the proportion of the diameter of each pier to the span of the arch: but the true diameter, according to Ex. 149., Vol. III. p. 410., should be one sixth of the span, or 26 in.: the height, however, of the piers is only 10 ft., instead of 13 ft.

While the proportion of one sixth, in the above-mentioned experiment, gives the balancing point, the same is the case between the diameter of the pier and its height; for 1 in. in the diameter equals 6 in. in height of the pier, or 2 in. to 1 ft.

Now, in Newington Church, the piers are 2 in. within the true diameter, which would require their height to be shortened 1 ft.: but they are shortened 3 ft.; therefore the strength may be estimated as 2 ft. within the balancing point, as given in the above experiment; and which, by another experiment, nearly equals

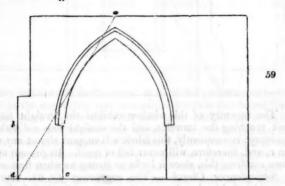
one third of the weight of one of the piers.

The height of the masonry above the arches is 3 ft. In the experiment fig. 141., Vol. III. p. 359., it is shown that, when the masonry is completed up to the dotted line a b, the strength of the fabric is increased double; and the height of this dotted line corresponds very closely with the masonry of this church. If, therefore, any one of these arches, composed only of vonssoirs, and placed on these piers, will carry one third of the weight of one of the piers, it will, with the masonry above, as represented in the engraving, carry or balance with two thirds of the weight of one of the piers. Now, these arches and piers, being placed abutting against each other, and having the tower at one end, and stout walls with cross arches at the other, are evidently secured against falling.

The dotted straight line a d, just touching the intrados, falls

on the pier at a distance without its centre; whereas, in Hartlip Church, the dotted straight line $a \ d$ falls on the top of the pier at a distance within the centre.

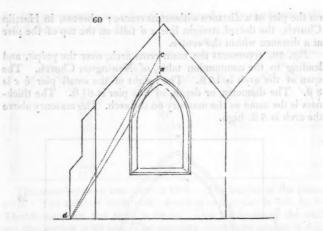
Fig. 59. represents the main cross arch, over the pulpit, and leading to the communion table, of Newington Church. The span of the arch is 15 ft. The height of the small pier b c is 8 ft. The diameter, or depth, of this pier is $6\frac{1}{2}$ ft. The thickness is the same as the masonry on the arch. The masonry above the arch is 3 ft. high.



In 15 ft. there are 180 in.; and one sixth of this gives 30 in. for the true diameter of the pier: but the depth of the pier b c equals 78 in. Or, the true diameter to the depth of this pier is as 1 to $2\frac{1}{4}$.

In the experiment fig. 68., Vol. III. p. 206, 207., it may be seen that twice the depth of a pier adds four times to the strength. Again, in the experiment fig. 149., Vol. III. p. 410., when the pier is reduced in its height to one half, the arch and pier will carry twice the weight of the pier. A straight line may also be drawn from a to d (fig. 59.), which nearly falls within the voussoirs. Moreover, the pier b c is farther strengthened by a cross wall. All these circumstances being considered, this fabric is capable of supporting a great weight on a. The test of experiment proved the arch and pier to stand firm under the weight of 60 lb. placed at a; consequently, they would carry more: but this was a sufficient test of strength; and this weight of 60 lb. equalled twenty times the weight of the small pier.

Fig. 60. represents an eastern window of Newington Church. The span of the arch is 8 ft. The height of the window to the spring of the arch is 7½ ft. The height of the masonry from the ground to the bottom of the window is 8 ft. The walls on each side of the window are 6½ ft. The depth of the buttress is 4 ft.



The masonry of this window exhibits the straight line a d just touching the intrados, and the straight line c d within the masonry; consequently, this fabric will support almost any weight on c, and, therefore, will never fall of itself. Its present appearance confirms this, since it looks as strong as when first erected.

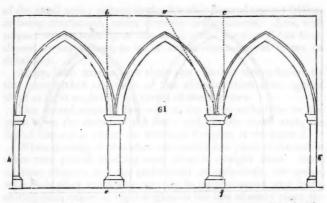
Sittingbourne Church. — The engraving fig. 61. represents one side of this church: g is the tower wall; and h the cross walls, &c. The span of the arch is 14 ft. 3 in. The height of the piers, 11 ft. 2 in. The shaft of the pier, 8 ft. 8 in. The diameter of each pier, 24 in. The thickness of the masonry on the arches, 2 ft. 9 in. The height of the masonry above the arches, 4 ft. The piers are, in form, circular and octagonal alternately.

In 14 ft. 3 in. there are 171 in., which, divided by 6, gives 28½ in. for the true diameter of the pier: but the pier is only 24 in. in diameter; therefore it is 4½ in. within the balancing

point.

It has been before shown, in the description of Newington Church, that every 2 in. less in the diameter of a pier requires a reduction in its height of 1 ft., to preserve the equilibrium. In this instance, then, as the diameter of the pier is $4\frac{1}{2}$ in. within the one sixth of the span, the reduction in the height of the pier must be 2 ft. 3 in. Now, this sum, taken from the span of 14 ft. 3 in., makes the true height of the pier to be 12 ft.: but the height of the pier is 11 ft. 2 in.; therefore it is 10 in. within the balancing point.

On submitting one arch and pier of this church to the test of experiment, the results were, that, with voussoirs only, the arch and pier carried three eighths of a pound on the crown. When



masonry was erected on the arch, equal to the proportions represented in the engraving, and as contained within the dotted lines and the piers b e, f c, the arch and piers carried on a $2\frac{1}{2}$ lb. Now, the weight of one pier equals $1\frac{3}{8}$ lb.; consequently, the arch will carry, or balance with, nearly twice the weight of one pier. These arches, being three in number, are, together with their piers, placed between the tower wall at one end, and a cross wall, &c., at the other, and are thus sufficiently secured against falling.

The effects of the pedestal and capital, which project beyond, and exceed the diameter of, the shaft of each pier, are not taken into the calculation in any of the churches here considered. They, however, by their increased base and height, shorten each pier a little, and, consequently, contribute to the stability of the whole structure. The dotted line a d falls very nearly on the outside edge of the pier.

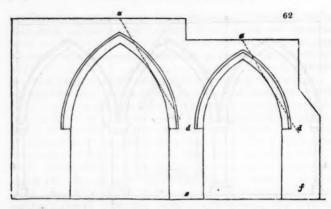
Fig. 62. represents two arches of this church. The larger arch separates the body of the church from the altar chancel.

Relative to the larger Arch. The span between the piers is 16 ft. 2 in. The height of the pier e is 11 ft. 2 in. The diameter, or depth, of the pier e is 5 ft. 9 in. The thickness of the wall on the arch is 2 ft. 9 in. The masonry above the arch is 3 ft. 6 in.

In 16 ft. 2 in. there are 194 in.; which, divided by 6, gives $32\frac{1}{3}$ in., or 2 ft. 8 in., for the true diameter: but the depth, or diameter, of the pier e is 5 ft. 9 in.; it is therefore twice the true diameter, and 5 in. over. The height of the pier e is 11 ft. 2 in.; therefore shorter than the span by 5 ft.

We have, then, in these two instances of the diameter and height of the pier, great increase of strength to support the arch

beyond the balancing point.



Under the test of experiment, the arch composed of voussoirs only, and the pier e, made, for the sake of convenience, 6 in. or 6 ft. through, instead of 5 ft. 9 in., carried on the crown 14 lb. Now, the pier employed weighed 4 lb.; therefore the arch balanced with three and a half times the weight of the pier e. On completing the masonry, to correspond with the drawing, the arch carried 56 lb.; this weight equals fourteen times the weight of the pier e.

Relative to the small Arch. The span of the arch is 12 ft. 6 in. The height of the pier f is 11 ft. 2 in. The diameter, or depth, of the pier is 6 ft. 3 in. The thickness of wall, and the height of the masonry above the arch, are the same as in the larger

arch.

In this span there are 150 in., which, divided by 6, gives 25 in. for the true diameter: but the pier f is 75 in. through, or just three times the true balancing diameter. The height of the pier f is 11 ft. 2 in.; it is therefore 16 in. shorter than the balancing height. Here, again, considerable strength is gained beyond the balancing point, which is proved by the following experiments:—

With the arch constructed of voussoirs only, and the pier the same as with the larger arch, it carried on the crown 18 lb., or four and a half times the weight of the pier of 4 lb.: and, with masonry above, as in the engraving, the arch stood firmly under 64 lb.: therefore it would have carried more, particularly as the experimental pier was 3 in. within the diameter of the pier f.

Having proceeded thus far, let the effects of these two arches resting upon the same pier e, be now taken into consideration.

It has been shown that the pier e is itself of sufficient firmness to carry the large arch and masonry. It is, however, assisted in its stability against the thrust of this arch by the counterscting thrust

of the small arch; consequently, it is ably secured against falling, or being overturned, under common circumstances. And, with respect to the stability of the small arch, the pier f has been shown, by experiment, to be of ample dimensions to insure its durability.

Again, both arches have their piers further strengthened by the cross arches and walls of the church, which abut against

them at right angles to the thrust of these arches.

The dotted straight line a d, in the large arch, falls at the point d, on the centre of the pier: and, in the small arch, the dotted line a d is within the centre of the pier, at the point d.

When treating of churches, the arches and piers contained in them were placed abutting each other in straight lines. Now, in some chapels, and the undercrofts of cathedrals, the arches with their piers are found running in parallel series, and intersecting each other at right angles, in the line of every pier; the object being the formation of a basis for floors above.

ART. IV. A Word in Behalf of modern Houses. By W. H. L.

Were we to believe many persons (writers as well as talkers, and talkers as well as writers), not only is architectural taste at an exceedingly low ebb, both as compared with what it is in other countries, and with what it has been in our own till within the last fifty or sixty years, but even building itself is greatly

deteriorated from what it used to be.

It is easy to assert this, nor is it at all difficult, by means of a little dexterity, to make such assertion appear tolerably well supported by facts and instances; these latter being so selected as to throw the whole weight into one scale. This may be done either by invidiously comparing, or contrasting, the best works of a former period with very mediocre ones of the present day, to the disparagement of the actual state of architecture among us; or by unfairly estimating what it was by some of the choicest samples, and judging of what it now is either by very inferior ones, or else by buildings of a class altogether different from, and avowedly of far less pretension than, any brought forward on the other side of the argument.

When such a writer as Captain Marryat dashes off an extravaganza on "modern town houses" for the New Monthly Magazine, in a strain of undisguised and most outré caricature; heaping together all the most preposterous and whimsical incidents his lively imagination supplies him with; we are at liberty to consider it either exceedingly amusing, or dull and overstrained, just as we may happen to relish it. Yet we can no more receive such facetiae as sober evidence, than we can admit

the grotesque sketchings of Boz, and the highly coloured Pickwick absurdities, to be accurate portraitures of life and manners. In spite, therefore, of the exceedingly unfavourable view which Captain Marryat takes of modern house-building, I venture to affirm, that, so far from having in any degree declined, it never was at all comparable to what it now is at any former period, either as regards the individual dwellings, or the situation and

other circumstances affecting them.

In order to judge the matter fairly, we must compare together houses of the same class and size, and not bring forward such as, though now tenanted by persons not at all wealthier than those who inhabit second or third-rate ones, were considered as of very superior description when first erected. Except, too, in being more substantially built, even these will be found to bear hardly any comparison with the generality of modern houses. By way of direct example, which will be far more satisfactory and forcible than vague general statements, we have, for one class of houses, at least, only to look at Bedford Row, the houses in which were, at the time of their being erected, considered excellent; yet, except in regard to mere size, they must be allowed to be much inferior to modern ones upon nearly the same scale, or even approaching it. Besides being destitute of the slightest pretensions to embellishment (for they are frigidly naked), they have a most mean and meagre appearance, owing to the number of windows squeezed together between narrow piers; and also to the sashes themselves being fixed in ugly wooden borders or framing (architraves they hardly deserve to be called), and hardly set back at all within the face of the wall. One consequence of this is, that, whether really so or not, the walls themselves appear deficient in thickness, and the windows too much exposed. Another great disadvantage is, that the kitchen areas are narrow and dismal.

The same dull, heavy, and uncouth style, only a few of whose defects have been above indicated, prevails in the buildings of the Temple, and those of the other inns of court; the chief difference being, that these latter have ponderous wooden cornices, with here and there an ugly leaden waterspout running down the front of the building. As far, therefore, as taste alone is concerned, our modern-built London houses will very well endure a comparison with those of about the middle of the last century; and, if we go still further back, the contrast will be still more to the advantage of the present day. By no means is sit intended to affirm that our private houses can lay claim to much praise on the score of durability. They are not intended to last for centuries; which circumstance, if it be matter of censure at all, does not arise from the incapacity of modern builders, but because the cost must be limited to the means of the

occupiers. The censure, therefore, if it fall any where, must fall upon the public - upon their stinginess or their poverty. Perhaps, too, what is made matter of reproach and grief has been, in reality, highly favourable to improvement in various ways; because, in consequence of the continual repairing and rebuilding thus occasioned, opportunities for adopting improvements are afforded, which would not otherwise occur to the same extent. Had London houses been built to endure for ages, all their original defects and inconveniences would have been perpetuated; nor would any of those numerous alterations have taken place which we now meet with. Nay, more than this, it may very fairly be questioned, whether, had such been the case, many schemes for public improvements also would not have been dropped, even had they been entertained at all; for it is not at all likely that whole districts of substantially erected buildings would have been sacrificed in order to widen narrow streets and open new ones. So that, before we indulge in any lackadaisical lamentations, we ought to convince ourselves that both our metropolis and its houses were so complete in every respect, that alteration could be attended with no improvement.

To those who still ask in what the improvement we insist upon consists we say, Go and look about in the Strand*; compare the old houses in that street with those lately erected, both the one and the other occupied by tradesmen and shopkeepers; and then, if you cannot discern any superiority of any kind on the part of the latter, you may, if you please, assign it to the former, with their ugly garret windows peeping over the top of a mere wall, and their other windows crammed so closely together, that there is hardly space sufficient to place a chair between them in the rooms within. In fact, architects, at least, have every reason to bless the window tax; which, it may be presumed, has had no slight influence in correcting our architectural taste, and hindering us from putting three windows into a space sufficient for two, or two where a single one shows itself to more advantage. Although taste has nothing whatever to do with a minister's budget, it must be allowed that that tax, and the hair-powder tax, have assisted in getting rid of two very preposterous fashions. And, as regards windows, it may be safely asserted, notwithstanding a contrary opinion appears to prevail, that our climate is as little adapted to great quantity of window in proportion to the solid parts of the walls, as that of Italy, although for a different reason; because it occasions the rooms to have a cold and chilling appearance in winter time. To be sure, we may block them up as much as we please withinside, by means of ample

^{*} The new range of buildings facing the west front of the Bank, in Prince's Street, also affords a striking instance of improved street architecture.

window draperies; but then, if we thus reduce two apertures to half their size, we might as well content ourselves with a single one, which would be preferable as regards external effect, while it would also distribute the light more agreeably within.

Whatever may be the case with modern houses, modern shops have certainly not been behindhand in the march of improve-They must be allowed to be greatly better than those which they have superseded, if only in not having the curved projecting windows formerly in vogue. As far as elegance and taste are concerned, whether in their exteriors or the shops themselves, there has certainly been no very great falling off: on the contrary, many of the first-rate shops now exhibit a degree of luxury and display in their fitting up that would at one time have been considered extravagant sumptuousness, even in the drawingroom of a man of fortune. Plate-glass windows, mirrors from floor to ceiling, rich chandeliers, candelabra of classical forms, counters, &c., of highly polished mahogany, elegant stoves, enriched ceilings, carpeted floors, bronze, brass, gilding -- all contribute to render some of these places so gay and dazzling, that, if we are "a nation of shopkeepers," it must be owned many of our shopkeepers seem to keep palaces for their customers.

Besides all this internal luxury, some of the "shop fronts" themselves, as they are technically termed, present much beauty of architectural design. They are, it must be confessed, comparatively few; nor are they upon such a scale as, when beheld together with other objects, to strike those whose chief criterion of merit is positive size; but among them may be pointed out, as particularly worthy of notice, no less for the originality than for the taste displayed in them, one in Old Bond Street, designed by Inwood; and another in Tavistock Place, Woburn Square, by Maddox. It would not be very difficult to show that a decided improvement, as respects various particulars, has likewise taken place in architectural design generally: but we cannot stop to enumerate them now; therefore, if we speak of them at all, they must form the subject of another paper.

ART. V. Notes on modern Shop Fronts. By AMICUS. No. I.

EVERY one speaks in praise of the improvements of London; and, within a very few years, nearly the whole of the leading thoroughfares have undergone total change. Old houses have been pulled down, and the places which they occupied with their dingy forms have been supplied with neat stuccoed dwellings, reflecting the bright rays of a summer sun to such a de-

gree of intensity as to become painful to look upon; streets have been widened, so as to admit the sun's rays where they have never before penetrated; and columns of all orders and styles. in their smart compoed coating, present their rotund bodies everywhere before our wondering eyes. One day we pass up a dark inconvenient street, with its gloomy brick walls and manysquared windows, peering about the unwashed and dust-covered door-styles for the name which has stood unchanged for years. We leave this spot for a while, and the magic wand of improvement has changed the narrow street to a wide bustling thoroughfare; the brick walls, to gaily coloured stone or compost; and the tiny squares of discoloured glass have given place to gigantic polished plates of that material, extending from house to house in such a manner, that we wonder how the superstructure is supported. But, among these vast improvements, the proportion of architectural incongruities is astounding. Let us take, for the present, some of the newly erected houses in the city, near London Bridge, the most monstrous production among which is the circular north-east end of Fish Street Hill. In this sweep, which is of very considerable extent, every propriety of architectural fitness is violated: the shop is one uninterrupted height of window from the stall-board to the cornice under the first floor windows, and, from party wall to party wall, only intercepted by glass doors; the sash-bars are either black, or very dark brown or grey; so that even the divisions of the squares are scarcely seen. Over this is erected a ponderous composition of six three-quarter columns, in antæ, raised so as to comprise two stories; beneath the entablature, and above, is another story, with something like piers or large pedestals over the columns; and the whole surmounted by the roof. Could the proprietor have wished to have this immense shop window to spoil his stock; or did the architect consider what he was doing? If we take a view through the shop window, the ray of vision forming the chord line of the arc of the plan, we almost fear lest the whole cumbrous fabric should topple upon our heads; and we instinctively hurry past the building, for fear of the consequences. But if, in our survey, we have time to turn our eyes a little on one side, we may see the actual supports of the building, little iron columns, of a dark colour, to hide them from view: but the apparent support is glass! Think but a moment of six columns, each about 2 ft. 6 in. in diameter, with masses of brickwork between them, the whole body raised, perhaps, nearly 40 ft. into the air, with no other apparent support than a sheet of glass raised on its edge! We know that it is well constructed; we know that it will not fall: but, if each of the columns had had a pier to stand upon, we should have looked upon the building with greater satisfaction, and we should then 300

with more pleasure have offered our praise to the general arrangement of the improvements (for they are great improvements, notwithstanding individual failures) in this neighbourhood. Surely, the architect never reflected upon the appearance his design would assume when erected, if he were so blind as to imagine his design could look well, when all architectural fitness was destroyed. Or was it the fault of his employer; or did the situation demand this impropriety? This is the worst production, the most unreasonable, in this new neighbourhood; but there are many others that require fitness; and on the opposite side of the street are two houses which deserve attention for their excellence. There is a solidity in the lower parts of the composition of these buildings, which gives a degree of consequence and dignity to them which is wanting in many of those surrounding them. The only thing, perhaps, which is not perfectly consistent is, that in one the piers and arches (I believe I am right) are grained to imitate oak; and thus the most perishable material is placed in the situation which should have been occupied by the most durable one. This is a misapplication of materials which I shall speak of hereafter. In the new street from the Bridge to the Mansion House, the whole of the ground stories have been better arranged: substantial piers actually carry the whole weight of the buildings, and the general appearance of stability is not violated. But the florid architectural display of engaged Corinthian columns, I must consider in bad taste; for they cannot be seen as columns ought to be seen: they occupy the space which would have been better employed in enlarging the rooms; and, altogether, they produce a heaviness in the whole effect by no means desirable. This is not the case in the new buildings now erecting opposite the Bank; these are good specimens of street architecture; there is no ostentation of massive columns; no injudicious display, and very little for any critic to complain of. I might prefer Grecianised detail; and I decidedly object to the balusters under the windows being used only for ornament. If the windows had been continued down, and the balusters projected from the face of the wall in a small degree, just enough to call it a balcony, and not so much as those erected, the whole effect would have been more sparkling: the light and shade would have been better; and the variety in the different projections of the balconies would have added agreeably to the design. As a general composition, these buildings are very successful; and they are certainly the best at present in this part of the city. all warmen characters and by wheren

Many architects of the present day appear to have two distinct principles of composition: and, perhaps, a combination of the two would be a desideratum. One principle is applied to public buildings, and the other to private ones, including shops,

In the former, the lower parts of the building are made to support the upper; and a solidity is here given consistent with the situation in which it is placed, and the office which it is to perform. In the latter, the reverse is the case: the massive parts are at the top, and the delicate parts, minute and fragile, are below; and, being painfully weak in reality, as well as appearance (for the real supports are purposely concealed), we expect every moment that the huge mass will crush its feeble supports. and crumble to atoms. A combination of the heavy and the delicate might satisfy all: for instance, in a public building, the new St. Dunstan's Church is too plain in the lower part of the tower for the extremely rich summit: the contrast is too great. and the eye should be led by easy contrasts from plain to rich. Not only do great contrasts displease the eye, but they do not satisfy the mind. Contrasts are as obviously desirable in architecture as they are in music; and though an air, without modulation, would be monotonous, too much modulation would be disagreeable.

In private architecture (including shops), a portion of the weight and strength of the upper part of the building, if applied to the lower, and some of the excess of ornament bestowed upon the shop, if applied to the upper part of the house, in most cases, might compose a reasonable design. Again, I will observe that decorative painting is carried to such an extent, that we seek in vain for consistent cornice or pilaster in the many shop designs in which London abounds. A cornice, perhaps about 18 in. or less in height, extending the whole width of a house (perhaps 18 ft.), without any support intervening, is painted marble: and yet who ever heard of a marble beam supporting a four-storied house? If we must have such a display of window, an arch, turned from one house to the other, upon a solid pier, at the party walls; or a straight beam, of the dimensions which would obviously be sufficient to support the superincumbent weight, and that painted in imitation of wood, but not cross-grained, like the root of a tree, would be more consistent than all the fancy work of the decorator: but to make a slip of stone support a large house is monstrous. Do architects order these things?

ART. VI. The Architectural Début at the new Apartments of the Royal Academy. By CANDIDUS.

[—]Just returned from the Academy's exhibition, which, as far as the architectural drawings are concerned, is altogether the very worst I have yet seen during the whole course of the time I have been in the habit of visiting it; that is, for the last sixteen years. One might almost imagine it to be the intention of the

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ing it into disgrace, and disgusting the public with such specimens of it. Else wherefore are the miserable things we this year meet with - I will not say hung up so as to be thrust just before our eyes, but wherefore are they admitted at all? It will be said, it is not the fault of the Academy, if better designs are not sent in. Undoubtedly, it is not; yet, although it does not possess such authority as will compel architects to offer good drawings, it certainly has the power of rejecting bad ones; and, that power being possessed, it might be conceived that policy alone, to say nothing of decency, would induce the judges to exert it in a case like the present. Is it, I would ask, by receiving any rubbish, so long as a vacant space can be found on the walls to hang it up, that the Academy either consults its own dignity, or discharges its duty? Does it conceive that it encourages art, or does it in any degree attend to its interest, by admitting, and thereby countenancing, works of sheer imbecility? So far from adopting such a degree of judicious severity as would render it in some respect honourable, at least creditable, to have a work received into the exhibition, the Academy has this year virtually proclaimed that nothing (in architecture, I mean, for it is of that alone I am speaking) can be too vile, or too preposterously absurd, for acceptance. Or is it to be imagined that, whatever may be the case with regard to paintings, works of architecture are considered as out of the pale of the Academy's jurisdiction, and that it is no one's business to sit in judgment beforehand on the architectural designs, and to weed out from among them, at any rate, such as are absolutely disgraceful. If this be any excuse, the Academy is perfectly welcome to it; though, in itself, it is nothing short of damnatory; as it cannot be made use of without convicting that body of being. as far as concerns one of the fine arts it is intended to promote, not only useless, but positively mischievous.

This language runs the risk of being deemed too fiercely severe. Beforehand, I grant it may seem to be so; but it will not be thought more than just, by any one who has locked at those two architectural abominations, Nos. 1006. and 1054. In one word, it is a downright insult, both to the architectural profession and to the public, to hang up such truly infamous performances. Truly, the Academy has opened its new exhibition rooms with works of most propitious augury for architecture, and most creditable to the present state of that art in this country! The only comfort left us is, that the very enormity itself will tend to bring about some reform, by exciting such strong, if not general, animadversion, as may induce the Academy to show henceforth a little more discretion and decency. If the Royal Academy has no regard whatever, either for the interests or the honour of architecture.

why do not our architects emancipate themselves from it altogether? Why does not the Institute, if it be really anxious to vindicate the dignity of the art itself, and to promote a right feeling for it among the public (as it is obviously for the direct interest of the profession itself to do), establish an annual exhibition of its own; not one that is merely the fag end, as it were, of an exhibition of pictures, but which should be on an independent and adequate footing? which should, besides, consist of something more than picture-drawings and elevations, and wherein some kind of classification, both as regards the style of execution, and the subjects themselves, should be observed? But revenons à nos moutons.

A very cursory examination of No. 1038., Design for the New Houses of Parliament, by L. N. Cottingham, will convince any one that the charge which has been brought against Mr. Barry, of having pirated from it, is most preposterous, unless he has discovered the philosopher's stone, and the art of transmuting architectural lead into gold, tastelessness into beauty. most that can be said in its favour is, that it is not altogether such an extravaganza as Gandy's British Legislative Mansions, No. 1035. Although with no pretensions to architectural importance (it consisting of no more than a few piers and railings). No. 1044., Design for the Entrance to the Old or Royal Well Walk, Cheltenham, now erecting, &c., by T. Bellamy, is one of the most pleasing and tasteful things in the room; and it proves that, if an artist possess real talent, he will make it display itself. let the subject itself seem ever so unpromising; while, on the other hand, there are many who aim at the most ambitious fancies, huge national buildings, &c., yet, at the same time, plainly show they possess neither the invention nor the ability to design a door or window. In this latter class we may fairly put down Mr. Vulliamy (would that we could as easily put down the whole of the class itself!), who exhibits to us, in No. 1119., the Proposed new Front for the Royal Institution. Now, although the building in Albemarle Street is at present of the most homespun description, it has, at least, the negative merit of not being ridiculous; which it certainly would become, and not a little offensive withal, should it ever be improved according to Mr. Vulliamy's recipe. There are three ranges of windows, thirteen on a floor; consequently, unless the whole front were to be entirely remodelled, these numerous apertures must determine its character, and, if they cannot be got rid of, ought to be rendered attractive as well as indispensable features. Yet what does Mr. Vulliamy propose to do? By what happy stroke of invention does he think to transform this dowdy in brick and mortar into a piece of Grecian architecture? Why, by sticking up fourteen Corinthian columns against the piers! Really, if we

cannot get beyond such vile sophistications and adulterations, such extravagant dulness, we ought either to go to school afresh, or else abandon Grecian and Roman architecture altogether. At any rate, should the Royal Institution accede to this architectural proposal, it will deserve to be formally anathematised by the Institute. One thing is quite certain, that Mr. Vulliamy

has not the fear of Welby Pugin before his eyes.

The designs by the new professor of architecture (viz. 1014. 1016. 1022., for a Metropolitan Hospital, and 1034., a Triumphal Entrance to the Horse-Guards) do not rise above respectability: they are pleasing, but display no extraordinary taste, still less any power of imagination. Gandy, on the other hand, possesses a superabundance of imagination, yet of the most ill-regulated sort, and almost, in fact, to the exclusion of common sense. Were he and Mr. Vulliamy to bite each other, it might prove greatly to the advantage of both; for the one would probably be chilled into propriety, the other kindled into some de-

gree of fancy.

No. 1005., an Interior View of the Arcade beneath the Viaduct of the Westminster and Greenwich Railway, by D. Paine, (of which, by the by, there was a lithograph engraving published some time back,) manifests much greater taste and propriety, and cleverness of application, than many subjects which seem to afford far greater scope for design. There is likewise a good deal of effect in the drawing itself, which is more than can be affirmed of the generality of those exhibited this year; for many of the designs are very poor indeed in their drawing, and wretched in their colouring. Sections are prohibited, very properly so, it is to be presumed, as being absolutely unintelligible to the multitude, and altogether superfluous and uninteresting to architects; and interiors might as well be in the same predicament; for, except a few views from old churches, and buildings of that description, there are not above two works of that class in the room; namely, designs for a synagogue. Stay, there is a third, which, the catalogue informs us, is a staircase for a royal palace; but it is placed where it would require another staircase, or at least a ladder, to mount to it, in order to make out what it is. Perhaps we lose nothing by its being so elevated, while the catalogue is a gainer by its being received, along with many other things of the nos numeri sumus class, this year a tolerably numerous one. Really, the Academy still requires to have another professorship, and it should appoint a professor of hanging against next season. Of the two designs just mentioned, both of which, it may be presumed, were for the same purpose. No. 1051. View of the Ark of the new Synagogue in Great St. Helen's, by J. Davies, is decidedly better than 1125., Design for the Interior of a Synagogue, by D. Mocatta; and that, too, both as

regards the drawing itself, and the architectural composition. It is, indeed, coloured in a very clever and picture-like manner, more so than almost anything in the room; and there is so much brilliant and scenic effect in the general arrangement, and some of the ideas, that we cannot help feeling pleased with it, though it is not so well studied in all its parts as it might have been; for, taking the features separately, there are some which by no means

evince either a correct or an elegant taste.

Among designs adopted for execution, that by Mr. Basevi (1069.), for the front of the Fitzwilliam Museum, at Cambridge, towards Trumpington Street, deserves attention, were it only for the importance of the subject. Although it cannot lay claim to any striking originality, it is a very fair composition, consisting of an octostyle Roman Corinthian portico, with three open intercolumns adjoining it on each side, where it projects beyond the general mass of the edifice, similarly to the Royal Institution at Manchester. The façade is completed by a single interpilaster at each extremity. The whole, consequently, consists very nearly of columns disposed upon two lines; a mode which not only produces greater richness, but is a deviation from the ordinary one, of placing a portico against a building. The absence of windows will also give a classical character to this façade: yet it may be questioned whether it will show itself to the same advantage as in the drawing; because, as it will face the east, the whole will be in shade during the greater part of the day, and much of the effect here given to it must be lost. Surely, the architect might have contrived to admit light into the portico, either from above or on the west side, so as to obtain some degree of brilliancy in the centre, where the columns would have relieved themselves against a light background - that is, an open vestibule, so lighted, seen beyond them. No. 1096., one of the four designs selected by the University of Cambridge for the Fitzwilliam Museum, by E. Lapidge, a name quite new to me, has considerable merit; and, owing to the statues and sculpture introduced in it, announces itself more distinctly as a public museum. It has also a dome, an architectural feature in which Cambridge is at present deficient; but, in itself, it is not of the best form that might have been selected. This design is more extensive than Mr. Basevi's, and is apparently intended to occupy the entire length from north to south; whereas the other seems a centre, to which wings may afterwards be added. Whether it was this circumstance which occasioned the final decision in its favour, it is hardly possible even to conjecture, there being neither plan nor sections of any kind, from which we might judge which architect had shown greater taste and judgement in the interior. In this respect, it is to be hoped, Mr. Basevi's design will, when executed, be found perfectly satisfactory. Ad interim, such hope Vol. IV. - No. 40.

ought to be tempered with a little mistrust, it being more prudent, in all cases, not to suffer one's expectations to be oversanguine. Again, I am tempted to ask, Why do not either the Institute, or the architectural profession as a body, emancipate themselves from the leading-strings of such a cross-grained drynurse as the Royal Academy shows itself to be towards them; shake off the arbitrary and whimsical restrictions it imposes upon them; and establish such an annual exhibition as would do them credit? Are they so totally devoid of all spirit of independence, as to be content to jog upon a pillion behind the painters? does it arise from pusillanimity and a cowardly mistrust? As a mere speculation, such an exhibition might probably not answer; at least, it might be some years before it would even pay its own expenses. What then? Has art no more generous speculations? Is it not only to attempt nothing save what promises to be a profitable ready-money concern, but ought no sacrifice whatever

to be made for the sake of promoting its interests?

Leaving those whom it may at all concern, either to answer, or, if they cannot answer, to ruminate upon, the above queries, I will proceed with my examination, or, rather, now hasten to terminate it, by pointing out one or two more drawings, that prevent the Academy's architectural room being this year a mere blank: I might say, worse than a blank, since the bare walls would hardly be so discouraging a sight as most of the things now hung up upon them. Nos. 1093. and 1111., the North Lodge at Chequers Court, Bucks., the seat of Sir Robert Frankland Russell, by E. B. Lamb, show that con amore taste and feeling will give vent to, and find scope for, themselves in the most limited subject. So-called picturesque cottages are, for the most part, equally abominations to the painter and the architect; but the one here represented is particularly happy, and not least of all so for the effect produced by the variety of materials and their colours, as well as for the expression of forms. No. 1118., the Red Maids' Hospital, Bristol, C. Dyer, is a very good application of the Tudor style. There is also much merit in No. 1133., a Baronial Mansion in the County of Surrey, now erecting under the superintendence of B. Ferrey. The gateway tower comes in well in the drawing; and the house itself, which is, like the gateway, of red brick and stone, is of a quiet unostentatious character, with little of embellishment, yet far more pleasing than those overdone attempts at Old English architecture, where showy, but ill-studied, features are put together in such manner as to betray no feeling whatever for the style itself.

I had hoped that Mr. Cockerell would have allowed us to see something of the buildings he is about to erect at Cambridge; but he has not a single drawing this year; neither is there any thing by Barry, and many others who have hitherto generally exhibited; nor has any one ventured to attempt, even upon paper, any specimen of polychromy, notwithstanding that is a subject which would seem to have engaged the attention of the Institute. In fact, whatever good the Institute itself may be doing, there is not the slightest manifestation of it here; for, as far as design goes, there is this year a most terrible falling off from the average architectural talent which used to be shown at Somerset House.

ART. VII. On Public Illuminations in accordance with Architectural Forms. From Memorandums made in Italy. By HENRY NOEL HUMPHREYS.

[The great want of taste, or rather, perhaps, its misapplication, displayed in the late illuminations for the queen's birthday will give some interest to the following extract from a MS. which has furnished us with articles in two preceding Numbers. — Cond.]

On Easter Sunday, the closing day of the splendid ceremonials of the Holy Week, after the magic music of the Sistina has ceased, and the dress trappings of the interior of the great cathedral, with the wreaths and garlands, have disappeared, there is still another spectacle, which it is, perhaps, worth a journey to Rome to behold: this is the illumination of St. Peter's. The interior illumination, imagined by Buonarotti, which was effected by a single, but vast, illuminated cross suspended from the centre of the dome, is discontinued; for it was found that, in these latter times, instead of the crowd of kneeling pilgrims who formerly filled the arena beneath this splendidly poetic image of the cross, from which the church declares all true light to proceed, the sanctity of the place was profaned by a crowd of lazy loungers; and what, in the eyes of the Church of Rome, was. worse than all, principally heretics; and, this evil continually increasing, the custom was very properly discontinued. But though I acknowledge that its suppression, under the circumstances, was advisable, yet I cannot help wishing that it had been deferred until after my visit to Rome, even though I had been one of the lazy crowd of loungers myself; for it must have been a magnificent sight to see that vast and glittering fane thus illuminated from one grand focus; its towering vault bathed in a blaze of light, whilst each retiring mass along its majestic ailes received, at first, broad and massive gleams, then smaller. though perhaps more brilliant, touches; and, at length, except where some point of a burnished capital, or the rich offering of some favoured shrine, glittered like a star in the distance, all sunk into darkness and indefinable gloom. There must have been a mysterious and poetic beauty in this scene, not to be

described by the pen. The pencil of a Martin or a Danby might perhaps, give some idea of the dreamy grandeur of that scene which will be witnessed no more. The day has passed for such displays in connexion with religion; for, to say the best of it, it was but a species of quackery, which the growing education of the age has unmasked. This prying age has seen things de trop près. We have thrown open the "Holy of Holies;" we have, in fact, stripped

"The mountain of its robe of blue."

and, to speak the truth, many have rushed in, mayhap fools, where the wisest and best had feared to tread. The aggregate of happiness has not yet, perhaps, been increased by these innovations, which are but the little depredations that must necessarily be committed in the grand march upon which the human race has now fairly started; and, though the effects of the grand advance may appear at present doubtful, we must recollect that all is yet imperfect. We are in the state of transition, which must always have its restlessness and its struggles; like the imago, ere it can escape from the pupa case, and assert that glorious liberty for which its previous stages had been but the preparation.

To return to the business of the day: although the interior illumination has been discontinued, that of the exterior and the piazza is still one of the attractions of the "settimana santa;" and, as the sun sank behind the Vatican, and the short southern twilight began to deepen, I quitted my apartment; and, to avoid the scuffling line of carriages in the Via Condotti, I crossed the Tiber at Ripetta, at the hour of "Ave Maria," and, passing under the fortifications of S. Angelo, approached the scene by way of the Porta Angelica, at the back of the great palace.

As the dusk of evening increased, the lamps, which traced out every line of the architecture of St. Peter's, began to twinkle upon the vast dome, now growing dim and blue in the mist of evening; and, as they assumed, as nearly as possible, the same tint as the last streaks of day that yet lingered behind, they produced a singularly beautiful effect, each lamp seeming a perforation through which the sunset gleams were seen; giving the mass a lace-like lightness, which under no other circumstances it could have assumed. But this effect could only be witnessed from the direction in which I had approached, which threw the peculiar light which succeeds sunset immediately behind the building. I slowly quitted this interesting picture; and, passing through the dark arch of the Porta Angelica, entered the Rione di Borgo (the quarter of Rome in which the Vatican and the great Basilica are built), and soon found myself in the midst of the Piazza di San Pietro, already crowded with carriages, spectators, and lemonade purveyors: for it had been a sultry April day, of which, in Rome, I felt many as hot as any that occur with us in the height of July and August. The colonnade round the piazza was also lighted, but merely by simple rows of lamps along each prominent moulding, and round each base and capital of its forest of Tuscan columns. This simple architectural illumination has an effect of grandeur in the mass which we can scarcely conceive from the specimens of British illuminations which we have seen; the most splendid of which, from the nature of the various devices employed, destroy the grandeur, form, and magnitude of the buildings they are intended to embellish. They are certainly very brilliant with the profusion of coloured lamps; but their W. R.s, A. R.s, laurel wreaths, British lions, and cornucopiæ, stars, and crowns, would effectually cut up the finest architecture in the world; and, though the effect may be glaring, even brilliant, a line of street so illuminated could never stand a comparison with one illuminated in accordance with its architectural forms. I never saw St. Peter's to such advantage as on this night, and I never saw the public buildings of London to such disadvantage as when spotted with their crowns and stars, and initials of coloured lamps. add another

As I stood considering St. Peter's, although I could not but admire the excellent taste of the plan of its illumination, yet I must confess that the brilliancy of the effect was not exactly what I had expected; and I became anxious for the darkness to close in, imagining that the effect would be thereby increased: for neither the number nor effect of the lights equalled my expectations, although their disposition was so good. While thus engaged, it occurred to me (as I had been informed) that the illumination was effected all at once, at a preconcerted moment; and I was at a loss to imagine how the deep paper lamps, with a light at the bottom, could have been thus simultaneously ignited; or why, if so, the coup had been performed so soon, and before it could produce any great effect. I now discovered, upon enquiry and closer examination, that such had not been the case, and that, in point of fact, the present lighting was a mere ébauche, or sketch, a slight outline of the highly wrought effect which was to follow at the second hour of night, that is to say, two hours after sunset. This information gave me ample time to move from point to point, as far as the crowded state of the piazza would allow me, and watch the preparations. I found that in front of each statue, on the top of the circular colonnade, a vase of some inflammable material was placed; whilst behind each of these grim saints of stone stood a little imp, match in hand, ready, upon the concerted signal, to set all in a blaze. The same plan was observed with regard to the columns, with the exception that the lights were placed behind; so that, when

all was lighted, in front of a brilliant background, the column would appear dark as a mass of the blackest marble, supporting the cornice and statues in vivid light. The same effects of chiar oscuro were, I found, being observed in the facade of the main building, and on the dome. I was informed (for, of course, I could not see) that the centres and corners of the different compartments were marked by similar pots of combustibles; whilst the lines of moulding were marked by smaller ones, ignited by a train; and the effect produced with the pillars of the colonnade was to be repeated in the great gallery; the whole to be simultaneously fired at the great signal. This is the manner in which I should like to see such a street as our Regent Street illuminated upon some great occasion, as the style of the buildings would afford ample opportunity for a similar display; and, if the present rapid progress of street architecture continues, every principal line will soon form equal, if not superior, advantages: but, for the present system of illumination, the old dingy brick

affords just as good, if not a better, background.*

The piazza became at length completely jammed with carriages; and, as the clocks of Rome at length struck, in every variety of tone of which bell-metal is capable, the wished-for second hour of night, all eyes were turned, as with one impulse, to the great point of attraction. A brilliant light issued, as it were, from the great ball, and, describing a dazzling circle, settled upon the highest point of the enormous cross. This was the signal. In a moment, lights flashed from every part, playing like meteors round the vast cupola, and settling, as by magic, each in its proper place: it was but a breath; and the illumination was complete: one which, I do not hesitate to say, was the finest coup d'effet I ever witnessed: the first burst was truly astounding. Ilingered long upon the spot, where the unvarying plash of the great fountains, in whose spray the lights were reflected in showers of fiery spangles, formed a fine and hushing accompaniment to the busy sounds of the dispersing crowd. As it grew late, I strolled to the Ponte Sisto, to get the ensemble more complete, and was not disappointed in the effect. From Ripetta I had it again, but more distant; and my last glimpse was from the elevated point of the Trinità di Monte, whence, though rather subdued, it had a fine effect, rising like some castle of enchantment beyond the now dark outlines of the quiet palaces of Rome.

London, May, 1837.

^{*} In the late illuminations in London, the Travellers' Club formed a solitary exception to these remarks; and, though not very effective, was still an approach to that style of illumination which may be termed architectural.

MISCELLANEOUS INTELLIGENCE.

ART. I. Foreign Notices.

FRANCE.

M. G. ABEL BLOUET, who has recently been elected an Honorary and Corresponding Member of the Institute of British Architects, is the author of the exquisite work entitled the Baths of Caracalla, which he measured and restored during the period of his studies at Rome, as Pensionnaire of the French Academy. The great care and accuracy, as well as the taste and knowledge, which he evinced in that work, induced the French government to appoint him the architect to the scientific expedition sent to the Morea after the battle of Navarino. The fruits of this journey have already been published, and prove the judicious appointment of M. Blouet, whose restoration of the Temple of Jupiter at Olympia equals any work of a like nature ever published in this country. About eighteen months since, he paid a short visit to England; and, on his return to France, was despatched to America, to take the plans of the American prisons. On his way back to France, he again passed through this country; and, having expressed to the members of the Institute his strong desire to be associated with that Society, he was elected one of the Foreign Members of the body. We understand that M. Hittorff of Paris is daily expected, and has announced his intention to read a paper before the Institute on the Polychromy of Architecture. — M. J. B. A.

ART. II. Domestic Notices.

ENGLAND.

THE Library of the late George Dance, R. A., Architect of Newgate and the Lunatic Hospital of St. Luke's, in Old Street Road, is about to be brought to the hammer by Evans, and contains some original editions of the most valuable standard works on architecture. We hear that his son, Colonel Sir Charles Dance, has also offered to the trustees of the British Museum six volumes of portraits, drawn by his father, who was accustomed, for his amusement after dinner, to sketch the profiles of his friends who partook of his hospitality. Nobles, divines, physicians, artists, actors, and poets, in fact, all the distinguished men of the day, whether noted for their taste or science, are among the series. There are striking portraits of Hardwicke, Cockerell, Lewis, Mylne, Bettingham, and John Carr of York, architects of the period of Mr. Dance. A memorandum on the back of Carr's portrait states that he was born at Horbury, near Wakefield, Yorkshire, in 1721; lived forty years in York, where he was twice Lord Mayor, a magistrate for the North and West Ridings, and for the county and city of York. He rebuilt the parish church of Horbury at his own expense, and presented the parish with a good organ and ring of bells. This edifice he began in 1791, and finished in 1793: it cost him 10,000l.—M. J. B. A.

Devonshire.—The Western Markets at Exeter. The accompanying

DEVONSHIRE.— The Western Markets at Exeter. The accompanying medal has been struck to commemorate the erection of the Western Market at Exeter. It is engraved by Mr. B. Wyon; and, therefore, it will no doubt esteemed as a work of fine art, independently of any interest it may possess as an architectural memorial. In this latter respect, it may be observed, as a remarkable coincidence, that, in excavating for the foundations of the new building, a great number of Roman coins and other antiquities were discovered; and amongst them a medal struck on an occasion precisely similar; viz. the erection of a meat market at Rome by Nero; having on the reverse the repre-

sentation of a building of two stories high, crowned with a cupola, and inscribed MAC: AUG: This circumstance first suggested the idea of striking the present medal, which in execution greatly surpasses its Roman prototype; and it might be added, that this mode of commemorating the erection of public buildings, besides being warranted by the ancients, is desirable in itself, as being likely to outlast all other records, and as giving employment to the medallic art, which so well deserves encouragement. The Exeter Market has been in use four months past, although some of the accessory buildings are not yet completed; and I hope soon to be able to send you some lithographic plans of the whole structure. - Charles Fowler. Gordon Square, April 18, 1837.

The medal is of bronze, and a piece of excellent workmanship. On one side is an elevation of the market, with the words "Meat and Corn Market" over it; and under it, "Founded by the Chamber, MDCCCXXXV. C. Fowler, Architect." On the reverse are the arms of Exeter, encircled by a wreath of oak leaves (the civic crown). Around it are the words " Completed by the

Council of Exeter, MDCCCXXXVII."

When we receive the lithographs so kindly promised by Mr. Fowler, we shall probably give engravings of them, and also of this medal: the latter, for the purpose of stimulating other cities to follow the example of Exeter on similar occasions. - Cond.

Essex. — A chaste and elegant chapel has lately been built on an eminence which commands a very fine view, called Buckhurst Hill, in the parish of

Chigwell, near Epping. — Tyro.

Haggerstone Church. — Originally, the pulpit stood almost in a corner, against the front of the gallery; but now it has been removed, and placed midway between the two galleries; by which alteration the appearance of the interior is improved; and the voice of the preacher is better heard by the con-

gregation. - Id.

ISLE OF WIGHT .- Building Churches. Owing to the extent of the population in the Isle of Wight, a meeting was held at the Town Hall, Newport, where a church has not long since been reared, for forming a body in aid of building more churches there. The large saloon which the party assembled in contained some of the rarest specimens of Grecian and Roman sculpture which the late Sir R. Worsley possessed. - Id.

ART. III. Retrospective Criticism.

EDGE Railways. (p. 257.) - You and Mr. Gordon are quite wrong on the subject of rendering turnpike roads a substitute for railways: it is physically impossible; and any one may be readily convinced of this by a very little reading, except always the "steam carriage projectors." R. Mallet. Ryder's Row, Dublin, May 11. 1837.

We do profess to be a master of the subject of edge railways, and are very likely wrong. We should therefore be much obliged to Mr. Mallet to set us right, for the benefit of our readers, no less than of ourselves .- Cond.

Warming and Ventilating. - Dr. Ure's article (p. 161.) appears to me to contain more valuable information than all the treatises on the subject which I have ever seen. I trust this paper will meet with all the attention it deserves, and that means may be taken to give it extensive publicity. If Mr. Barry has seen it, he will surely avail himself of it in his arrangements for the new Houses of Parliament, which, on the principles recommended by Dr. Ure, might be made much more certain and efficient than by the plans which have lately been acted on, although they may be better than those which preceded them, -R. J. E. April, 1837.